BEFORE THE
Federal Communications Commission
WASHINGTON, D.C.

MAR 1 1 1996

In the Matter of	)	
	)	
Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	CC Docket 94-102

DOCKET FILE COPY ORIGINAL

JOINT REPLY COMMENTS OF THE CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION, THE NATIONAL EMERGENCY NUMBER ASSOCIATION, THE ASSOCIATION OF PUBLIC-SAFETY COMMUNICATIONS OFFICIALS, AND THE NATIONAL ASSOCIATION OF STATE NINE ONE ONE ADMINISTRATORS

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March 11, 1996

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SUMMARY

CTIA and the three public safety communications organizations, the National Emergency Number Association ("NENA"), the Association of Public-Safety Communications Officials ("APCO"), and the National Association of State Nine One One Administrators ("NASNA") are gratified by the broad support for the Consensus Agreement expressed in the Comments filed in this docket on March 4, 1996. While some commenters take issue with certain of the proposals set forth in the Consensus Agreement, there is broad support for the two-phase approach, including the technical objectives of each phase, the need to establish a funding mechanism, and the legal and other issues described in the Agreement.

Technology does not stand still, so there always will be new technologies and the need to develop new standards. Given our current understanding of the laws of physics and radio propagation, we cannot expect perfection. Public agencies will have to continue to weigh the costs against the benefits of providing enhanced 911 capabilities. None of these realities is going to disappear, and none should be used to delay the Commission's efforts in this docket to establish CMRS carriers' obligations to provide Phase I and Phase II enhanced 911 services, given the development of suitable technology and the establishment of non-discriminatory cost-recovery mechanisms.

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JOINT REPLY COMMENTS OF THE CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION, THE NATIONAL EMERGENCY NUMBER ASSOCIATION, THE ASSOCIATION OF PUBLIC-SAFETY COMMUNICATIONS OFFICIALS, AND THE NATIONAL ASSOCIATION OF STATE NINE ONE ONE ADMINISTRATORS

The Cellular Telecommunications Industry Association ("CTIA")[1] and the three public safety communications organizations, the National Emergency Number Association ("NENA"), the Association of Public-Safety Communications Officials ("APCO"), and the National Association of State Nine One One Administrators ("NASNA")(collectively referred to herein as the "Consenting Parties"), respectfully submit this reply to the comments responding to the "Consensus Agreement" filed in this docket as an *ex parte* presentation

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[1] CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the association covers all Commercial Mobile Radio Service ("CMRS") providers, including cellular, personal communications services, enhanced specialized mobile radio, and mobile satellite services. A list of CTIA's members is attached.

titled "Public Safety-Wireless Industry Consensus: Wireless Compatibility Issues."[2]

CTIA and the three public safety communications organizations are gratified by the broad support for the Consensus Agreement expressed in the Comments filed in this docket on March 4, 1996. As is to be expected, some commenters have taken issue with certain of the proposals set forth in the Consensus Agreement, but there is broad support for the two-phase approach, including the technical objectives of each phase, as well as broad support for the funding obligations, and the legal and other issues described in the Consensus Agreement. Most importantly, while some commenters express concerns that the Phase I and Phase II deadlines are overly optimistic, others acknowledge that technology has been developed to accomplish each of the elements of the Consensus Agreement, and indicate their willingness to implement the goals set forth in the Consensus Agreement.

In developing the Consensus Agreement, the Consenting Parties recognized that one could always wait for technology to be perfected and further refined. However, based on the recent experience of CTIA's members and the public safety organizations with both the delivery of Phase I-type ANI and

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[2] *See* Public Notice dated February 16, 1996, seeking comments on the Consensus Agreement.

pseudo-ANI services, and through the field trials of Phase II-type ALI service, we believe that each of the elements of the Consensus is achievable, particularly when conditioned by the three principles that form the predicate to the Consensus Agreement. Now is the time for the Commission to endorse what is available and feasible. Naturally, it will be perfected in the years to come. Given the value of saving human lives and property, we should not make the perfect the enemy of the good.[3]

I. Three Principles Form the Predicate to Phase I and Phase II Implementation

In reaching their Consensus Agreement, CTIA and the three public safety communications organizations adopted three principles that provide the predicate to Phase I and Phase II implementation. First, as noted above, was the principle that the perfect should not be the enemy of the good. Thus, rather than delay the availability of any enhancements to wireless 911 services while awaiting the development of standards and technologies for all CMRS Common Air Interfaces and serving arrangements, the Consensus Agreement sets forth a phased-in implementation

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[3] The concept of the perfect as the enemy of the good is drawn from Voltaire's comment about dramatic art in his Philosophical Dictionary of 1764. *See William Safire On Language,* The New York Times, March 3, 1996, Section 6 at 34.

schedule that seeks to accomplish what is reasonably feasible while recognizing that there will be gaps in wireless E-911 service, just as there are gaps in landline 911 service.[4]

Second, the Consenting Parties recognized that a precondition to a CMRS carrier's obligation to provide enhanced 911 service,[5] was a *bona fide* request by a Public Safety Answering Point ("PSAP") willing and able to take advantage of such wireless compatibility. No carrier should be expected to provide basic or enhanced 911 service if the new services are not wanted or cannot be used.[6] While the Consenting Parties believed their previous comments had conveyed this assumption, the comments of the Rural Cellular Association,[7] Southwestern Bell Mobile Systems,[8] US West,[9]

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[4] According to the Notice of Proposed Rule Making in this proceeding, thirty years after AT&T made the digits 9-1-1 available nationally as an emergency telephone number, 89 percent of the wireline access lines in the United States are served by some form of 911 service. NPRM at ¶ 3. Approximately 85 percent of 911 services include some form of enhanced 911 service. Id., at ¶6.

[5] Or even basic 911 service.

[6] Or, as described below, if the means of reimbursement have not been put in place, or if the local exchange carrier's network is not equipped for such service(s).

[7] Rural Cellular Association Comments at 2.

[8] Additional Comments of Southwestern Bell Mobile Systems at 2 (the key to providing such services is a PSAP willing and able to take the calls), and at 9 (Phase I capability may be dependent on the PSAP's ability to accept and return 10 digits).

and Vanguard Cellular[10] suggest the need to make explicit the precondition of a *bona fide* request for Phase I or Phase II service by a PSAP willing and able to take advantage of such wireless compatibility. However, once a means of funding is identified and put in place, a PSAP's *bona fide* request should require a wireless carrier to meet the deadlines established for Phase I and Phase II services if the local exchange carrier and the PSAP are prepared to handle the enhanced service.[11]

Third, the Consenting Parties recognized that a public funding mechanism is required as prerequisite to imposing obligations on CMRS carriers (as well as local exchange carriers and PSAPs) to provide enhanced 911 service. Establishment of cost recovery mechanism as a precondition for imposing the phased-in approach to wireless enhanced 911 service was noted by many commenters.[12] There also was

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[9] US West's Supplemental Comments at 4-5 (the details of deployment in a given locality are best left to the impacted parties), and at 7 (regarding Phase II requirements).

[10] Comments of Vanguard Cellular Systems, Inc. at 7.

[11] Local exchange carriers also must be prepared to implement wireless carriers' enhanced 911 services. See Consensus Agreement at 1; Comments of GTE Mobilnet Incorporated at 3.

[12] Comments of the Ad Hoc Rural Cellular Coalition at 7; BellSouth Comments at 8; Comments of the Personal Communications Industry Association at 8-9; Comments of the Rural Cellular Association at 5-6; Additional Comments of Southwestern Bell Mobile Systems at 6; US WEST's

broad support for the proposal in the Consensus Agreement to permit the individual states to determine the funding mechanism that best met the needs of its citizens, while recognizing the important role of the FCC in preempting inconsistent state and local requirements,[13] and insuring that 911 fees are nondiscriminatory.[14] In addition, a number of commenters noted that the implementation of Phase I enhanced 911 features may impose significant costs on both wireless and landline carriers.[15] The Consenting Parties agree with these commenters that funding should be available to reimburse carriers for any changes or upgrades they must make to provide enhanced 911 services.[16]

Supplemental Comments at 5, 10; and Comments of Vanguard Cellular Systems, Inc. at 4, 8.

[13] BellSouth Comments at 7-8.

[14] US WEST's Supplemental Comments at 10 (the benchmark should be on the charges imposed on subscribers -- landline or wireless-- not on carriers).

[15] See Additional Comments of Southwestern Bell Mobile Systems at 7; US WEST's Supplemental Comments at 5; Comments of Vanguard Cellular Systems at 6-7.

[16] The Consenting Parties support state and local funding mechanisms that are nondiscriminatory and reasonably targeted to achieve 911 enhancement.

II. Requests for Special Treatment and Exemptions Will Resolve Themselves if the Commission Adopts the Consensus Agreement's Three Principles

A number of commenters seek blanket exemptions for satellite-based CMRS service,[17] traditional Specialized Mobile Radio Service ("SMR"),[18] and rural cellular service.[19] While the Consenting Parties agree with these commenters that it is extremely unlikely that cost-effective solutions will be developed for these serving arrangements, we prefer predicating a CMRS carrier's obligation to provide enhanced 911 service on the existence of a *bona fide* request and the establishment of a cost recovery mechanism rather than on the creation an exemption. If a PSAP wishes to support such a service, and the state is willing to fund the development of the capability, there is no need to stand in the way of such a service. On the other hand, if no one has developed the means of providing enhanced 911 for certain CMRS services, or if the cost of providing enhanced 911

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[17] Comments of the AMSC Subsidiary Corporation; Comments of Motorola.

[18] Comments of the American Mobile Telecommunications Association (noting that the dispatcher can serve as an auxiliary to the PSAP); Comments of Blooston Mordkofsky, Jackson & Dickens; Additional Comments of NEXTEL Communications at 7; Comments of the Personal Communications Industry Association at 3.

[19] Comments of the Ad Hoc Rural Cellular Coalition; Comments of the Rural Cellular Association; US WEST's Supplemental Comments at 7-8.

service in rural areas (or elsewhere) would be prohibitively expensive, there will be no *bona fide* request, and/or there will not be public funding for the service. The absence of funding (with or without a *bona fide* request) will provide the needed exemption from the Phase I and Phase II requirements.

The Consensus Agreement acknowledges that there will be technologies for which there is no commercially available enhanced 911 technology, and also recognizes that system configurations, especially in rural or other thinly-populated areas, will not support ALI.[20] Instead of blanket exemptions, the Consenting Parties believe that the wireless and PSAP communities, working through industry standards bodies and their various trade associations, can provide guidance to their members and to the Commission by identifying the services, technologies, and recurring serving arrangements for which there is no commercially available enhanced 911 technology. This must be an on-going process to reflect the dynamic introduction of new technologies and services that characterize the CMRS industry.

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[20] Consensus Agreement at n.8 Densely populated areas will have service problems of their own, such as tunnels. Id.

The Commenting Parties acknowledge that there will be some wireless services, technologies, and serving arrangements that will not be able to support some or all of the elements of the Consensus Agreement. Either through individual request, or by way of industry working groups providing input to the industry and the Commission, we agree that there is a need to identify the recurring situations in advance in order to provide certainty to the affected parties, as well as to minimize the need for waivers of the Commission's rules. As noted above, the Consenting Parties believe this can best be accomplished through the established and on-going industry processes, and by relying on this process to provide input to the Commission if needed to create more certainty.

III. The Phase I Requirements

While there is broad support for the Phase I requirements, many commenters challenged the implementation schedule proposed by the Consensus Agreement. While two commenters urged the Commission to adopt a twelve month schedule,[21] others suggested that they would require more than eighteen months to provide PSAPs the ANI[22] and pseudo-ANI information.

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[21] Concepts to Operations; Additional Comments of KSI.

[22] BellSouth noted (at 4) that Calling Party Number ("CPN") requires SS-7 links, but suggested that ANI would be

While some of the comments note the need for SS-7 links to support Phase I capability and the concomitant need to define the standards for connecting CMRS and local exchange carrier common channel signaling networks,[23] many others endorse the Consensus Agreement's Phase I proposal, conditioned, as noted above, on the capability of the PSAP and local exchange network to handle such traffic.[24]

Phase I capability requires the CMRS carrier to transmit the equivalent of fourteen digits to twenty digits to identify both the caller's ANI, and the location of the cell, using a pseudo ANI. While a common channel signaling network, such as SS-7, is the optimal mechanism for such signaling, Feature Group D interconnection can also support the transmission of the necessary digits. In both instances, however, the local exchange network must support the interconnection and signaling requirements if the CMRS

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adequate for now; Northern Telecom noted that the ANI is not always the customer's MIN, especially in some Canadian markets. In either case, providing the MIN should permit PSAPs to call back wireless callers.

[23] BellSouth Comments at 4; Comments of GTE Mobilnet at 4; Comments of Motorola at 4; Comments of Northern Telecom at 3, Comments of the Personal Communications Industry Association at 9.

[24] Comments of the Ad Hoc Rural Cellular Coalition; Comments of GTE Mobilnet; Additional Comments of Nextel Communications; Additional Comments of Southwestern Bell Mobile Systems; US WEST's Supplemental Comments ("[t]here is now little question that [Phase I] capability can be made available in relatively short order").

switch ("MSC") is to be able to transfer this data to the PSAP. That is why the Consensus Agreement specifically conditioned Phase I obligations on the local exchange carrier's signaling capability.

Today, most interconnection from a MSC to a local exchange carrier 911 access tandem is by means of a CAMA interface. A CAMA trunk is an outmoded in-band signaling interconnection that allows only a single seven-digit ANI to be passed. Because of the limitations of CAMA signaling, the seven digits sent by a MSC may be either the subscriber's identity ("ANI") or the cell site identity (the "pseudo-ANI"), but not both. However, where the local exchange network supports Feature Group D interconnection, both cell site location and caller identification (in the form of a seven-digit or ten-digit Caller ID TLDN) can be sent simultaneously. Therefore, Phase I compliance is possible with Feature Group D interconnection.[25]

In any event, there is broad agreement that this is a transitional problem. Industry standards will be in place shortly for CMRS-to-local exchange network common channel

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[25] An alternative to Feature Group D signaling and common channel signaling is the evolutionary Path B approach outlined in the JEM reports. The Path B method allows CMRS carriers to insert caller information in the ALI database, which the PSAP can then retrieve and display. Two major vendors of ALI database equipment are working on this product and are believed to be close to implementing this technology.

signaling, the vendors have pledged their support to provide the needed equipment and upgrades, and both wireline and wireless carriers alike are expected to move quickly to connect their networks wherever such interconnection can be cost-justified.[26] Cost-justification, of course, can be reflected in the availability of public funding for 911 upgrades, and in state Public Utility Commission willingness to accelerate the installation of common channel signaling capabilities in local exchange carrier networks.

IV. The Phase II Requirements

There is also broad support for the Phase II proposal. While some of the commenters are to be commended for their broad support,[27] others support the Phase II objective while challenging the implementation schedule proposed by the Consensus Agreement.[28] In addition, two commenters ask the

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[26] The Consenting Parties understand that the needed standard is scheduled to be balloted by September, 1996, and that the work for all wireless interconnection standards recently has been consolidated in TIA's Committee TR45.2.

[27] Comments of Motorola at 7; Additional Comments of Nextel Communications at 5-6; Additional Comments of Southwestern Bell Mobile Systems at 5-6 (the agreement of the parties to work on the real life limitations as an implementation issue should not delay the adoption of the general rule).

[28] BellSouth Comments at 5; Comments of GTE Mobilnet at 4-5; Comments of the Personal Communications Industry Association at 11.

Commission to require that Phase II include ALI capability for tracking moving vehicles.[29]

The Consenting Parties believe that the various concerns regarding the implementation of the Phase II requirements are answered by reference to the three principles that form the predicate to the Consensus Agreement. For example, proposals to include ALI capability for tracking moving vehicles, and proposals to await the development and publication of industry standards for each and every CMRS Common Air Interface, both reflect perfection serving as the enemy of the good.

The concerns raised by others, both over the cost of ALI, and the availability of ALI in rural (and other) serving areas, already have been addressed in the Consensus Agreement.[30] As noted in Section II, above, the Commenting Parties acknowledge that there will be some wireless services, technologies, and serving arrangements that will not support some or all of the elements of the Consensus Agreement. We agree that there is a need to identify the recurring situations in advance of the Phase II requirements

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[29] Concepts to Operations; Additional Comments of KSI at 4.

[30] The Consensus Agreement acknowledges that there will be technologies for which there is no commercially available enhanced 911 technology, and also recognizes that system configurations, especially in rural or other thinly-populated areas, will not support ALI. See page 8, supra.

in order to provide certainty to the affected parties, as well as to minimize the need for waivers of the Commission's rules.

Technology does not stand still, so there always will be new wireless technologies in need of new industry standards. In our current understanding of the laws of physics and radio propagation, we cannot expect to provide ALI with 100 percent accuracy and converage. Public agencies will have to continue to weigh the costs against the benefits of providing enhanced 911 capabilities. None of these realities is going to disappear, and none of them should be used to delay the Commission's efforts in this docket to establish CMRS carriers' obligations to provide Phase I and Phase II enhanced 911 services, given the development of suitable technology and the establishment of non-discriminatory cost-recovery mechanisms.

CONCLUSION

For the foregoing reasons, the Commission should adopt the principles set forth in the Consensus Agreement reached by CTIA and the Public Safety organizations.

Respectfully submitted,

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March 11, 1996

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COMPANY_NAME	MEMBER_TYPE
360° Communications	CEL
AAT RSA CO. LP / CELLULAR ONE	CEL
Advantage Cellular Systems, Inc.	CEL
AGT Mobility Inc.	CEL
AirTouch Communications	CEL
ALLTEL Mobile Communications, Inc.	CEL
Alpha Cellular dba Cellular One	CEL
Ameritech Cellular Services	CEL
Appalachian Cellular General Partnership	CEL
Arctic Slope Telecommunications & Cellular, Inc.	CEL
AT&T Wireless Services, Inc.	CEL
Atlantic Cellular Company	CEL
B.C. Tel Mobility Cellular Inc.	CEL
Bachtel Cellular Liquidity, L.P.	CEL
Baton Rouge Cellular Telephone Company	CEL
Bell Atlantic NYNEX Mobile, Inc.	CEL
Bell Mobility	CEL
BellSouth Cellular Corporation	CEL
Blue Ridge Cellular, Inc.	CEL
Bluegrass Cellular, Inc.	CEL
Brazos Cellular Communications, Ltd.	CEL
Bristol Bay Cellular Partnership	CEL
C.C. Cellular	CEL
Cal-North Cellular	CEL
Carolina West Cellular	CEL
Celludyne II, Inc.	CEL
Cellular Communications, Inc.	CEL
Cellular Connection	CEL
Cellular Information Systems, Inc.	CEL
Cellular Mobile Systems of St. Cloud	CEL
Cellular One - Kokomo	CEL
Cellular One - Sioux Falls	CEL
Cellular One of Amarillo	CEL
Cellular One of San Luis Obispo	CEL
Cellular One of Upstate New York	CEL
Cellular Plus	CEL

Cellular South	CEL
Cellular XL Associates, L.P.	CEL
Century Cellunet, Inc.	CEL
Citizens Mohave Cellular	CEL
Clear Communications Group, Inc.	CEL
Coastel Communications Company	CEL
Comcast Cellular Communications, Inc.	CEL
CommNet Cellular, Inc.	CEL
Cone Enterprises, Inc.	CEL
Copper Valley Cellular	CEL
Dobson Cellular Systems, Inc.	CEL
Douglas Telecommunications Inc.	CEL
Durango Cellular Telephone Co.	CEL
Farmers Cellular Telephone, Inc.	CEL
First Cellular of Southern Illinois	CEL
Frontier Cellular	CEL
Grupo IUSACELL	CEL
GTE Mobilnet	CEL
Highland Cellular Inc.	CEL
Horizon Cellular Group	CEL
HS Comm., Inc. dba New Wave Cell. Comm.	CEL
Illinois Valley Cellular	CEL
Inland Cellular Telephone Co.	CEL
InterCel, Inc.	CEL
KaplanTelephone Company dba Pace Communications	CEL
La Ward Cellular	CEL
Larsen Cellular Communications, Inc.	CEL
Leaco Rural Telephone Cooperative, Inc.	CEL
Liberty Cellular Inc.	CEL
Lincoln Telecommunications	CEL
Lynn County Cellular Ltd. Part.	CEL
MACtel, Inc.	CEL
Maine Cellular	CEL
Maine Wireless Limited Partnership	CEL
Masters Cellular Part. dba Cellular One	CEL
Mercury Cellular & Paging	CEL
Mid-Missouri Cellular	CEL

MINNESOTA RSA 9 LTD. PART.	CEL
Mo. RSA 5 Part./Chariton Valley Cellular	CEL
Mobile Communications Systems L.P.	CEL
MobileTel, Inc.	CEL
MT&T Mobility	CEL
MTS Mobility	CEL
MUS CellularOne	CEL
New-Cell, Inc.	CEL
Oklahoma Western Telephone Co.	CEL
Oneonta Telephone Co., Inc. dba OTELCO	CEL
Pacific Bell Mobile Services	CEL
Pacific Telecom Cellular	CEL
Palmer Wireless, Inc.	CEL
Peoples Cellular	CEL
Petroleum Communications, Inc.	CEL
Pine Cellular Phones	CEL
Pioneer/Enid Cellular	CEL
Point Communications Company	CEL
Poka Lambro Telecommunications, Inc.	CEL
PriCellular Corporation	CEL
Public Service Cellular, Inc.	CEL
Ramcell of North Carolina	CEL
RFB Cellular, Inc.	CEL
Rogers Cantel Mobile Inc.	CEL
Rural Cellular Corporation	CEL
Santa Cruz Cellular Telephone, Inc.	CEL
Shenandoah Mobile Company	CEL
Sierra Cellular	CEL
Smith Bagley, Inc.	CEL
SNET Mobility, Inc.	CEL
South Alabama Cellular Communications	CEL
Southern Cellular, Inc.	CEL
Southwestern Bell Mobile Systems	CEL
StarCellular	CEL
Sterling Cellular	CEL
Summa Four, Ltd.	CEL
SYGNET Communications, Inc.	CEL

Texas RSA 1 Ltd. Part. dba XIT Cellular	CEL
Thumb Cellular Limited Partnership	CEL
Triad Utah L.P.	CEL
TX RSA 15B2 L.P. dba Five Star Cellular	CEL
U S WEST NewVector Group, Inc.	CEL
Union Cellular	CEL
United States Cellular Corporation	CEL
Unity Cellular Systems, Inc.	CEL
Valley Telecommunications Co.	CEL
Vanguard Cellular Systems, Inc.	CEL
Vitel Cellular	CEL
West Central Cellular	CEL
WESTERN MAINE CELLULAR, INC.	CEL
Western Wireless Corporation	CEL
Wireless One Network	CEL
Yorkville Telephone Cooperative, Inc.	CEL
Activated Communications, Inc.	ESMR
Geotek Communications, Inc.	ESMR
Nextel Communications, Inc.	ESMR
American Personal Communications(APC)	PCS
Ameritech Cellular Services	PCS
AT&T Wireless Services, Inc.	PCS
Cox Communications, Inc.	PCS
GTE Mobilnet	PCS
PCS PrimeCo	PCS
Poka Lambro Telecommunications, Inc.	PCS
Powertel PCS Partners, L.P.	PCS
Southwestern Bell Mobile Systems	PCS
Sprint c/o Sprint Spectrum	PCS
Western Wireless Corporation	PCS
American Mobile Satellite Corporation(AMSC)	SAT

CERTIFICATE OF SERVICE

I, Michael F. Altschul, hereby certify that on this 11th day of March, 1996, a copy of the foregoing Joint Reply Comments were served either by hand-delivery or by first class mail, postage prepaid, on each of the parties on the attached list.

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